



WMG2503

Wireless 802.11b/g PCIe Mini Card

Description

The WMG2503 is the new PCI Express Mini Card interface supporting both IEEE 802.11b/g in a form factor half the size of a Mini PCI card. The WMG2503 provides cost effectiveness, low power consumption, and low heat dissipation. For easy integration into the host device, the WMG2503 in full compliance with the PCI Express Mini Card specification supports USB 2.0 signaling over the Mini Card interface. Despite its small size, the WMG2503 delivers full IEEE 802.11b/g standards, as well as the advanced security and quality-of-service (QoS) features of 802.11i, 802.1x, and 802.11e.. It provides plug-and-play wireless connectivity in the 2.4-GHz band anywhere in the world.

Specification

Standards	IEEE 802.11b/g
Frequency Band	2412 ~ 2483 MHz
Operating Voltage	3.3V
Modulation	11g: Orthogonal Frequency Division Multiplexing (OFDM) 11b+: Packet Binary Convolution Coding (PBCC) 11b: Direct Sequence Spread Spectrum (DSSS) Note: No OFDM modulation on channel 14
Channels	USA (FCC): 11 channels (2.412GHz~2.462GHz) ETSI: 13 channels (2.412GHz~2.472GHz) Japan: 14 channels (2.412GHz~2.484GHz)
Output Interface	USB 2.0
Support Data Rate	802.11b (22Mbps, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps) 802.11g (54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps)
Output Power	11g/54Mbps OFDM: up to +14dBm 11b/11Mbps CCK: up to +18dBm
Physical Specification	Weight: TBD Dimension: 48.05 (L) x 30(W) mm PCB (thickness): 1.0 +/- 0.1 mm Height (thickness): TBD (included RF metal shield case)
Certifications	FCC, CE
Environment Conditions	Operating Temperature: 0°C ~ 60°C ambient temperature Storage Temperature: -20°C ~ 80°C ambient temperature Operating humidity: 90% maximum (non-condensing) Storage humidity: 90% maximum (non-condensing)

Features

- ❑ Support the IEEE 802.11b /g standard, data rates up to 54 Mbps
- ❑ USB 2.0 signaling on the PCI Express Mini Card interface, compatibility with USB 1.1 device
- ❑ Implement the latest standards for strong WLAN data encryption and authentication, ensuring maximum data privacy
- ❑ Dynamic Rate Shifting wireless transmission speed on the basis of signal strength to achieve maximum availability and link reliability
- ❑ Support a user friendly interface for easy configuration

Applications

